WHAT IS CLAIMED IS:

1.   Method to determine a register error, whereby at least one register mark (2, 2', 2'', 2''') is printed and at least one sensor (15, 15') records the at least one register mark (2, 2', 2'', 2'''), characterized in that the sheet edge of the sheet (3, 3', 3'', 3''') is recorded by the sensor (15, 15') and the register error is determined from the sensor data and target data.

2.   Method to determine a register error according to Claim 1, characterized in that the register mark (2, 2', 2'', 2''') is printed on a conveyor (11) to advance a sheet (3, 3', 3'', 3''').

3.   Method to determine a register error according to Claim 1, characterized in that the recording of the register mark (2, 2', 2'', 2''') and the sheet edge of the sheet (3, 3', 3'', 3''') is carried out during the printing process.

4.   Method according to Claim 1, characterized in that a register error is recorded in the conveying direction of the sheet (3, 3', 3'', 3''').

5.   Method according to Claim 1, characterized in that a register error perpendicular to the conveying direction of sheet (3, 3', 3'', 3''') is detected, whereby the sensor (15, 15') records at least one side edge of the sheet (3, 3', 3'', 3''').

6.   Method to determine a register error according to Claim 1, characterized in that at least two register marks (2, 2', 2'', 2''') are applied at a distance at right angles to the conveying direction; the register error is detected in the conveying direction of the sheet, and an angle error of the sheet (3, 3', 3'', 3''') is determined from the sensor data.

7.   Method according to Claim 1, characterized in that the sensor (15, 15') detects the register mark (2, 2', 2'', 2''') and, in reaction to the latter, a rotation angle of a driving roller of conveyor (11) is determined, the sensor (15, 15') detects the sheet edge and, in reaction to the latter, the rotation angle of the driving roller of conveyor (11) and the rotation angle difference are determined, and the rotation angle difference is compared with the target rotation angle difference, and the register error is determined from the comparison.

8.   Method according to Claim 1, characterized in that the register error is determined for various types of print substrates.

9.   Method according to Claim 8, characterized in that the register error for various types of print substrates is stored in an allocation table of a control device in the printing machine.

10.   Method according to Claim 1, characterized in that a number of register errors are statistically averaged.

11.   A control device (19) for determining a register error, characterized by at least one sensor (15) for recording the front edge of a sheet (3, 3', 3'', 3''') and at least one register mark (2, 2', 2'', 2''') and a device (30) for calculating a register error by sensor data of the sensor (15) and from stored data.

12.   A control device (19) according to Claim 10, characterized by including a device (30) for correcting the calculated register error.